Baseline mood and psychosocial characteristics of patients developing depressive symptoms during interleukin-2 and/or interferon-alpha cancer therapy

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Abstract

It has been suggested that patients with subclinical mood symptoms prior to initiating cytokine treatment (as revealed by elevated baseline scores on depression rating scales) are more likely to become clinically depressed during the course of cytokine therapy. The present study was designed to identify which specific preexisting symptoms predict development of depressive symptomatology during treatment with the cytokines, interleukin-2 (IL-2) and/or interferon-alpha (IFN-α), in patients with cancer. Thirty-two patients with renal cell carcinoma or malignant melanoma eligible to receive treatment with IL-2 and/or IFN-α were enrolled in the study. At baseline and after one month of cytokine therapy (endpoint), depressive symptoms were assessed using the

clinician-administered Montgomery–Asberg depression rating scale (MADRS). Illness-related coping strategies, social support, somatic complaints, quality of sleep and demographic factors were also assessed as relevant baseline predictive factors. MADRS scores significantly increased during cytokine therapy. Patients with moderate to marked depressive symptomatology at study endpoint exhibited higher baseline scores in dimensions of the MADRS scale assessing emotional (especially reported sadness), cognitive (especially pessimistic thoughts) and neurovegetative (sleep disturbances) symptoms compared to patients who remained free of depressive symptoms during cytokine therapy. Interestingly, only emotional symptoms and sleep disturbance at baseline, along with low social support, predicted severity of depressive symptoms at the end of the first month of therapy. By documenting specific behavioral vulnerability factors for cytokine-induced depressive symptoms, these findings may help identify patients at risk for mood disturbances during cytokine treatment and help target specific patient populations and specific symptoms for preventative strategies.
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